tightened threaded fasteners until a break away torque is reached;

measuring the torque values applied to the second previously tightened fastener and measuring the angle through which the second fastener rotates;

defining a second zero angle point to be a point at which a tangent from a torque versus angle plot, created from the measured torque and angle values from the second previously tightened fastener, crosses an angle axis;

defining a second audit angle to be the angle between the second zero angle point and the angle associated break away torque for the second previously tightened threaded fastener; and

comparing the first and second audit angles to determine relative clamp loads.

- 19. (Previously presented). A method as in claim 18 wherein the torque is applied until an angle of rotation between 1 and 15 degrees is achieved.
- 20. (Previously presented). A method as in claim 18 wherein audit angles are defined for the remainder of the plurality of tightened threaded fasteners and the plurality of audit angles are compared.
- 21. (Previously presented). A method as in claim 18 wherein the first and second audit angles are compared to a predetermined audit angle.
- 22. (New). A method for comparing relative clamp loads between a plurality of previously installed threaded fasteners comprising:

providing a plurality of previously tightened threaded releasing fasteners; applying an additional torque in a releasing direction a first of the previously tightened threaded fasteners until a break away torque is reached;

measuring the torque values applied to the first previously tightened fastener and measuring the angle through which the first fastener rotates;

defining a first zero-angle point to be a point at which a tangent from a torque versus angle plot, created from the measured torque and angle values from the first previously tightened fastener, crosses an angle axis;

defining a first audit angle to be the angle between the first zero-angle point and the angle associated break away torque for the first previously tightened threaded fastener;

applying a torque in a releasing direction a second of the previously tightened threaded fasteners until a break away torque is reached;

measuring the torque values applied to the second previously tightened fastener and measuring the angle through which the second fastener rotates;

defining a second zero angle point to be a point at which a tangent from a torque versus angle plot, created from the measured torque and angle values from the second previously tightened fastener, crosses an angle axis;

defining a second audit angle to be the angle between the second zero angle point and the angle associated break away torque for the second previously tightened threaded fastener; and

comparing the first and second audit angles to determine relative clamp loads.

- 23. (New). A method as in claim 18 wherein the torque is applied until an angle of rotation between 1 and 15 degrees is achieved.
- 24. (New). A method as in claim 18 wherein audit angles are defined for the remainder of the plurality of previously tightened threaded fasteners and the plurality of audit

S.N. 09/825,416

angles are compared.

25. (New). A method as in claim 18 wherein the first and second audit angles are compared to a predetermined audit angle.